

CLAIMS

We claim:

1 1. An optoelectronic component with an epitaxial semiconductor layer sequence
2 having an active zone that emits electromagnetic radiation, and at least one electrical
3 contact region having at least one radiation-transmissive electrical contact layer, which
4 contains ZnO and is electrically conductively connected to an outer semiconductor
5 layer,
6 wherein
7 the contact layer is provided with watertight material in such a way that it is
8 adequately protected against moisture.

1 2. The optoelectronic component according to claim 1,
2 wherein
3 watertight material is applied to free areas of the contact layer.

1 3. The optoelectronic component according to claim 2,
2 wherein
3 watertight material is applied to all the free areas of the contact layer.

1 4. The optoelectronic component according to claim 1,
2 wherein
3 the watertight material is a dielectric that is transparent to an electromagnetic radiation
4 emitted by the component.

1 5. The optoelectronic component according to claim 4,
2 wherein
3 the dielectric comprises one or more of the substances Si_xN_y , SiO , SiO_2 , Al_2O_3
4 and SiO_xN_y .

1 6. The optoelectronic component according to claim 1,
2 wherein
3 the refractive index of the watertight material is less than the refractive index of
4 the contact layer and it is adapted to the greatest possible extent in particular for a
5 minimization of reflections of the radiation emitted by the component at interfaces with
6 respect to the watertight material.

1 7. The optoelectronic component according to claim 1,
2 wherein
3 the contact layer has a thickness corresponding to about an integer multiple of
4 half the wavelength of a radiation emitted by the component, and the watertight material
5 has a thickness corresponding to about a quarter of said wavelength.

- 1 8. The optoelectronic component according to claim 1,
- 2 wherein
- 3 the thickness of the watertight material is about 50 to 200 nm, including the limits.